CDC's Newborn Screening Program - Role of Laboratories

[Announcer] This program is presented by the Centers for Disease Control and Prevention.

[Ken Johnson] When newborn screening started in the U.S. five decades ago, many health officials questioned whether such a large-scale program—testing every baby born in each state—was even possible. Today, every state screens babies for more than two dozen disorders, and they are quite real to the infants and families whose lives are forever changed by them. CDC's Newborn Screening Quality Assurance Program runs the only comprehensive laboratory in the world devoted to assuring the accuracy of newborn screening test results.

I'm Ken Johnson. Today, I'm talking to Dr. Carla Cuthbert about the program and its role in newborn screening. Welcome, Dr. Cuthbert.

[Dr. Carla Cuthbert] Hello, Ken, it's great to be here.

[Ken Johnson] Dr. Cuthbert, tell us what occurs during newborn screening.

[Dr. Carla Cuthbert] Newborn screening is one of the first tests a baby receives after birth. A tiny prick of the baby's foot provides a blood spot that allows the newborn screening laboratory to screen for at least 29 disorders. The testing results are reported to the baby's doctor who discusses it with the family. Most of the disorders that are screened for can be life threatening, so rapid awareness of their existence makes a difference in the early treatments and quality of life.

[Ken Johnson] Why is newborn screening so important?

[Dr. Carla Cuthbert] Well, for me, it's all about the babies. Managing the effects of a detectable condition also helps families. In the absence of screening, valuable time is lost until a doctor is able to diagnose these serious disorders. This is usually after babies suffer a health crisis and families endure extended and costly diagnostic procedures. Newborn screening detects these serious disorders very early so they can be managed in a timely manner. Newborn screening can give babies the best chance to lead healthy lives.

[Ken Johnson] What's the role of CDC's laboratories?

[Dr. Carla Cuthbert] CDC leads a collaborative effort with state and regional newborn screening laboratories to improve the quality and accuracy of tests. CDC's Newborn Screening Quality Assurance Program serves more than 85 U.S. newborn screening laboratories, more than 30 newborn screening test manufacturers, and laboratories in over 70 countries. We evaluate laboratory methods, provide reference samples, test filter paper used to collect newborn screening samples, and offer technical assistance and training. We work hard to make sure scientists have the latest technologies and testing methods to detect disorders in newborns.

[Ken Johnson] What do you envision as the future of newborn screening?

[Dr. Carla Cuthbert] Newborn screening's future will be influenced by advances in technology. New testing platforms and emerging technologies will allow us to use new markers to screen for new diseases. Health information technology will allow for more effective communication. Apart from the impact of technology, we envision more engagement with the public. We want to improve the understanding of the value of newborn screening among parents and families. Public understanding is important as we work to respond to whatever the future brings. We encourage parents to seek information about newborn screening before delivery. Talk to doctors, nurses, and others and actively seek out information about what newborn screening is and what it can do.

[Ken Johnson] Where can our listeners get more information about CDC's newborn screening program?

[Dr. Carla Cuthbert] Information and resources for parents and professionals are available online at cdc.gov/newbornscreening.

[Announcer] For the most accurate health information, visit www.cdc.gov or call 1-800-CDC-INFO.